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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,988	03/16/2001	Koichi Masukura	204905US2SRD	5115

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ALEXANDRIA, VA 22314

EXAMINER

HARRISON, CHANTE E

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 12/19/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/808,988

Applicant(s)

MASUKURA ET AL.

Examiner

Chante Harrison

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16-20 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) 15, 21 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-20 and 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/16/2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2-4, 7-8</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 15, 21 and 27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected method of generating a polygon, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: "S72" of Fig. 6. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-14, 16-20 and 22-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Jerome Lengyel, U.S. Patent 6,573,890 B1, 6/2003.

As per independent claim 1, Lengyel discloses approximating the object region in each of the frames with a polygon, the polygon having vertexes (col. 4, ll. 43-56); associating the vertexes in each of the frames with the respective vertexes in an adjacent frame of each of the frames (col. 15, ll. 11-20); obtaining trajectories linking the vertexes associated together based on the time-series variation of the frames (col. 8, ll. 56-67; col. 16, ll. 37-50); and generating the object region data based on the trajectories (col. 20, ll. 4-21).

As per dependent claims 2, 17 and 23, Lengyel discloses the vertexes in each of the frames are associated with the respective vertexes in the adjacent frame (col. 15, ll. 11-20) such that a distance between the vertexes in each of the frames and the respective vertexes in the adjacent frame is minimum (col. 8, ll. 56-67; col. 21, ll. 53-67).

As per dependent claim 3, Lengyel discloses the distance between the vertexes in each of frames and the respective vertexes in the adjacent frame is calculated after a center of gravity of the polygon in the each of the frames coincides with a

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center of gravity of the polygon in the adjacent frame (col. 21, ll. 53-67; col. 23, ll. 55-64; col. 24, ll. 19-24).

As per dependent claims 4, 7, 10 and 13, Lengyel discloses each of trajectories is approximated by a predetermined function, and the object region data is generated by using a parameter for the function (col. 9, ll. 20-35; col. 15, ll. 20-30).

As per dependent claims 5, 8, 11 and 14, Lengyel discloses the object region data includes position data of the vertexes of each of the frames and association data indicting correspondence of the vertexes between the frames (col. 15-16, ll. 53-9).

As per dependent claims 6, 18 and 24, Lengyel discloses the associating the vertexes with the respective vertexes comprises estimating vertexes in the adjacent frame based on the vertexes in the frames preceding to the adjacent frame (col. 15, ll. 11-20), and selecting the vertexes in the adjacent frame, that are closest to the estimated vertexes (col. 8, ll. 56-67; col. 21, ll. 53-67).

As per dependent claims 9, 19 and 25, Lengyel discloses the vertexes in each of frames have a characteristic quantity and the vertex in each of the frames and the vertex in the adjacent frame which have the closest characteristic quantity are associated with each other (col. 16, ll. 10-24).

As per independent claim 12, Lengyel discloses approximating the object region in each of the plurality of frames with a polygon (col. 4, ll. 43-56); estimating a plurality of vertexes of the polygon in a given frame based on trajectory data indicating vertexes of the polygon from a first frame to an immediately preceding frame of the given frame (col. 15, ll. 11-20); modifying the plurality of vertexes estimated so as to be associated with the object region in the given frame (col. 16, ll. 37-50); obtaining trajectory data indicating vertexes of the polygon from the first frame to the given frame (col. 8, ll. 56-67); and generating the object region data based on the trajectory data indicating vertexes of the polygon from the first frame to the given frame (col. 20, ll. 4-21).

As per independent claim 16, Lengyel discloses an apparatus for implementing the method of claim 1. Therefore the rationale applied in the rejection of claim 1 applies herein.

As per independent claim 20, Lengyel discloses an apparatus for implementing the method of claim 12. Therefore the rationale applied in the rejection of claim 1 applies herein.

As per independent claim 22, Lengyel discloses an article of manufacture for implementing the method of claim 1. Therefore the rationale applied in the rejection of claim 1 applies herein.

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As per independent claim 26, Lengyel discloses an article of manufacture for implementing the method of claim 12. Therefore the rationale applied in the rejection of claim 1 applies herein.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 703-305-3937. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6606.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Chante Harrison
Examiner
Art Unit 2672

December 8, 2003



MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600